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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,249	10/17/2000	Sergey Ignatchenko	CA919990041US1	3359
7590	11/24/2004		EXAMINER	
Louis P Herzberg Intellectual Property Law Dept IBM Corporation P O Box 218 Yorktown Heights, NY 10598			UNGAR, DANIEL M	
			ART UNIT	PAPER NUMBER
			2132	
DATE MAILED: 11/24/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/690,249	IGNATCHENKO ET AL.	
	Examiner	Art Unit	
	Daniel M. Ungar	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 October 2000 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: ____.

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1. Claims 1 – 29 have been examined.

PRIORITY

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

The certified copy has been filed in foreign application CA2287871, filed on November 1, 1999.

SPECIFICATION

3. The specification is objected to due to a number of informalities:

- a. Page 3, line 9: "where" should be lowercase.
- b. Page 4, line 5: sentence is missing period.
- c. In a number of places (Abstract; page 4, lines 7 and 9; page 6, lines 14, 23, and 25), the specification recites "an user" and "an unique identifier." Besides being inconsistent with other parts of the specification where "a user" and "a unique identifier" is used, it is improper to use the article "an" before a word that phonetically sounds like it begins with a consonant, even though orthographically it starts with a vowel. Thus, "user" is preceded by "a". Note that the words "hour" and "honorable" are preceded by "an" due to the reciprocal principle.
- d. Page 5, line 5: improper space before comma.
- e. "NB", the first word on page 10, is curious.
- f. Page 13, line 30 and page 15, line 10: ostensibly, "document" is misspelled, likely due to bad OCR.

Appropriate correction is required.

DRAWINGS

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Items 36, 40 of Figure 4.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Item 26, 33 of Figure 4; Item 79 of Figure 6a.

6. The drawings are objected to under 37 CFR 1.83(a) because they are incomplete and/or defective for the following reasons:

- a. A number of arrows and decision identifiers (i.e. "Yes" and "No") are absent from the drawings. The examiner will attempt to point these out in the following objections, but the drawings in general are replete with errors.
- b. Item 46 of Figure 5 is apparently in the wrong place. It doesn't point to anything meaningful.
- c. There is no "Yes" arrow coming from Item 24 of Figure 4.
- d. There is no arrow connecting Items 34 and 38 of Figure 4.
- e. There is no "Yes" arrow coming from Item 50 of Figure 5.
- f. Figure 6a: A box below Item 62 is lacking an item number and arrows. This figure is incomplete.
- g. "Principal" is misspelled in Item 62 of Figure 6a.
- h. "Its" is misspelled in Item 74 of Figure 6a.
- i. Figure 6b clearly does not originate from Item 72 of Figure 6a as demonstrated by the description.
- j. Figure 7: Usually, "Yes" and "No" stem from diamonds, not rectangles. This flowchart is incomplete.
- k. Figure 8: A box stemming from Item 106 is lacking an item number.

CLAIM REJECTIONS – 35 U.S.C. 112

7. Claims 4-8, 11, 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims that are not explicitly treated in the following objections are objected to due to their dependency on other, rejected claims.

8. Claim 4 recites "said storage means", for which there is insufficient antecedent basis. It is noted that Claim 1 does recite "storing data in [...] a storage system".

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9. Claim 6 recites "said storage", for which there is insufficient antecedent basis. It is noted that there would be antecedent basis for a storage system, storage control means, and storage means (although as it stands, storage means itself lacks antecedent basis).

10. Claim 7 limits Claim 5 by reciting, "said access control means". There is insufficient antecedent basis for this limitation in the claim. It is noted that Claim 6 does recite access control means.

11. Claim 11 recites "said database" and "said db server", for which there is insufficient antecedent basis.

12. Claim 15 recites "said storage means", for which there is insufficient antecedent basis. It is noted that Claim 12 does recite "storing data in [...] a storage system".

13. Claim 18 recites "said secured data", for which there is insufficient antecedent basis.

REJECTIONS – 35 U.S.C. 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1, 4, 6, 7, 8, 9, 10, 12, 15, 17, 18, 19, 20, 21, 24, 25, 26, 27, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Dan, et al., inventor for Patent Pumber 5,825,877 (assigned to International Business Machines). These rejections are made for the claims as best understood, in view of any rejections made due to indefiniteness (35 U.S.C. 112).

Dan, et al. disclose:

a trusted server, available to one or more users, to manage documents (see column 2, lines 20-25; Abstract; Figure 1). The
protected documents,
access control information, and

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all associated identifiers and
signatures

are stored in and accessible from data structures in a database, all within a communications system (see column 1, lines 49-59; Figure 2). This meets the limitations of a database server, a storage system, and storage control means for the data.

certificates for the data and access control information, generated by a cryptographic combination of the data to be protected and a key (see column 2, lines 30-37; column 2, line 55 – column 3, line 16). This meets the limitations of a unique identifier and data signatures for the purpose of authentication. Note further that Dan, et al. state that “if desired there could be a single certificate for both the code and its access list” (column 2, lines 36-7).

16. Specifically regarding claims 7 and 8, Dan, et al. disclose the determination of:
 - whether the data matches its signature,
 - whether the access control information matches its signature,
 - whether the two signatures correspond to the certifying authority’s private key, meeting the limitation of determining whether the unique identifier of the access control information corresponds with the unique identifier of the data, and
 - whether the access control permits or denies the user access (see column 3, lines 3-16; Figure 2; Figure 7), anda graphical user interface to provide the user with the result of the determination if access is allowed or disallowed (see column 2, lines 60-64).

REJECTIONS – 35 U.S.C. 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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18. Claims 2, 3, 5, 13, 14, 16, and 23 are rejected as being unpatentable over Dan, et al. as outlined above, in view of Preston, et al., Patent Number 5,052,040 ("Multiple user stored data cryptographic labeling system and method").

Dan, et al. teach the cryptographic signature of the document and access control information for authentication, but they fail to teach the encryption of the document and access control information themselves. However, Preston teaches the encryption of the data (see column 3, lines 52-61), and the access control information (see column 6, lines 20-36). It would have been obvious to one of ordinary skill in the art at the time of the invention to also encrypt the actual data and access control information of Dan, et al., to prevent unauthorized access of them, the motivation disclosed by Preston, et al.

19. Claims 11 and 22 are rejected as being unpatentable over Dan, et al. as outlined above, in view of Dujari, Patent Number 6,272,593.

Dan, et al. do not teach that a random identifier be requested to be used to uniquely identify the data to be stored. Dujari teaches the generation of random names (identifiers) prior to the storage of the data (column 5, lines 25-30). Only if that identifier is unique is that data stored with that identity; otherwise, an error results and the opportunity is given to generate another random identifier (column 6, lines 48-54). Thus, if one is motivated to store a document with an identifier that needs to be unique but not necessarily meaningful, as is taught by Dujari, it would have been obvious to one skilled in the art at the time of the invention to request to reserve a unique random identifier for a document to be stored, and to store it only if that identifier is verified to be unique.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel M. Ungar whose telephone number is 571.272.7960. The examiner can normally be reached on 8:30 - 6:00 Monday - Thursday, Alt. Fridays.

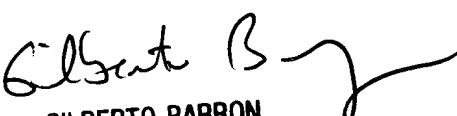
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571.272.3799. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Daniel M. Ungar


GILBERTO BARRON
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